

## Office Action Summary

Application No.

10/646,341

Applicant(s)

MARSH ET AL.

Examiner

JONATHAN G. STERRETT

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-38 and 49-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-38 and 49-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>4-2-2010</u> .                           |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application  |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                          |

### DETAILED ACTION

1. This **Final Office Action** is responsive to the amendment of 16 November 2009. Currently **Claims 11-38 and 49-72** are pending.

#### ***Response to Amendment***

2. The 35 USC 101 and 112 rejections are withdrawn

#### ***Response to Argument***

3. The arguments have been fully considered but they are not persuasive.

The applicant argues that Delgado fails to teach maintaining a reputation weight for each evaluation user based on their past evaluation activities.

The examiner respectfully disagrees:

The claim recites:

**automatically updating the reputation weights for each of one or more of the evaluator users based on a relationship of the quantitative assessments from the evaluation of that evaluator user to the quantitative assessments from the evaluations of other of the evaluator users; and**

The system in Delgado updates the reputation weights of a user based on the relationship of assessments from that evaluator to the assessments from the evaluations of the other evaluators. See page 1 column 1 – the weights for users are based on similarity (i.e. with other users) and are updated over time, since the algorithm is a learning algorithm.

Further on page 1 column 1 under 1. Introduction, the weights of users are updated based on what others are recommending (i.e. thus if a user deviates from what

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others are recommending, then their weight is decreased). Thus the examiner notes that the claim does not recite that the weights are based on their past evaluation activities, but that the weights are based on a relationship of the assessments of an evaluator to the assessments of other evaluators.

The applicant argues that the cited references fail to teach multiple content rating dimensions when evaluating content.

The examiner respectfully disagrees.

On page 245 column 2, Tiwana teaches a 1 to 5 rating, i.e. a multiple content rating dimensions when evaluating content.

On page 247 column 1, Tiwana teaches a feedback system of "useful" or "not useful", i.e. two dimensions thus multiple dimensions of rating content.

The applicant argues that no motivation has been provided for why Tiwana and Delgado would be combined.

The examiner respectfully disagrees.

KSR forecloses the need for motivation. Additionally, as is pointed out below, there is no destruction of either Tiwana or Delgado in combining their teachings. Both address issues associated with providing recommender systems where the ratings of individual users are combined in such a way that a user can benefit from the ratings provided by the community as a whole. The examiner notes that the applicant's claimed invention is nothing more than an obvious combination of what is known in the

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art regarding how online communities are organized to rate content (whether that content is a posting, a book or something else visible and accessible to the users in the community). The Supreme Court cautioned against granting a patent which was nothing more than a combination of known elements in the art. In this case, as is shown below, the applicant's claimed invention is exactly that – a combination of known in the art elements in the field of how online communities jointly collaborate to rate items.

### ***Claim Rejections - 35 USC § 103***

4 The following is a quotation of 35 USC. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 11-38 and 59-70** are rejected under 35 USC. 103(a) as being unpatentable over “A social exchange architecture for distributed Web communities” Amrit **Tiwana**, Ashley Bush. Journal of Knowledge Management. Kempston: 2001. Vol. 5, Iss. 3; p. 242 (7 pages), (hereinafter **Tiwana**) in view of US 6952678 Williams (hereinafter **Williams**)

Regarding **Claim 1**, Tiwana teaches:

**11. (Original) A method in a computing device for selecting information to provide to users based on reputations of evaluators of the information, the method comprising:**

**receiving from a reviewer user a review related to an item available from a web merchant, the receiving of the review being performed by one or more programmed computing systems of the Web merchant;**

page 247 column 2, user's review a particular product (i.e. an item).

**receiving multiple evaluations of the review, each of the multiple evaluations being from one of multiple evaluator users, who each has an existing reputation weight for the Web merchant that is based at least in part on previous evaluations supplied by that evaluator user for multiple other reviews for items available from the Web merchant, each received evaluation including a quantitative assessment of contents of the review for each of one or more of multiple content rating dimensions available for use in assessing the review,**

page 247 column 2, user's review a particular review of an item, based on a two-level feedback scale. Thus the reviews of the review are indicating a level of agreement with the review regarding whether they found them of value.

**automatically generating an aggregate assessment of the content of the review based at least in part on combining quantitative assessments from the received evaluations for the review,**

page 246 column 2, based on the reviewers evaluation of a review, votes of useful and not useful are tallied for a particular user.

Tiwana teaches a recommender system where users rate other reviewers' ratings, but does not teach; however Williams teaches:

**the generated aggregate assessments being further based on the existing reputation weights of the evaluator users in such a manner that a first quantitative assessment from a first evaluator user with a first reputation weight has a different impact on that generated aggregate assessment than that first quantitative assessment from a distinct second evaluator user with a distinct second reputation weight; the automatic generating being performed by the one or more programmed computing systems,**

See Figure 3 – note Merit, Links and wisdom coefficients for voting online – note the announcement – the more that a person has accomplished online, the more their vote counts – see also column 4 line 5-10 – influence weighted voting;

column 7 line 57-67 – column 8 line 1-10; workers increase their influence through their contributions to the working community;

column 8 line 53-63; the users judge each others' online contributions which affect their online credentials.

Column 9 line 45-67, wisdom and influence are credentials which are increased based on other's ratings of that user – these credentials can go up or down

Column 10 line 5-10 – influence weighted voting occurs when a user's credentials (based on another feedback indicator related to the conduct of the other member) are used to weight that user's rating of a user online (i.e. an adjustment based on the credential of another member) – see also column 12 line 27-30.

**automatically updating the existing reputation weights for each of one or more of the evaluator users based on a relationship of the quantitative assessments from the evaluation of that evaluator user to the quantitative assessments from the evaluations of other of the evaluator users, the automatic updating being performed by one or more programmed computing systems; and**

column 11 line 33-44; the weights are calculated for each credential; these weights are based on

column 16 line 1-30; col. 17:55-60, Figures 6a and 6b; Figure 7 #708, the credit earned (which affect a person's influence score) associated with an evaluation (by an evaluator user, i.e. someone who is providing feedback to another posting online) are determined based on the total merit assigned (see Figure 14 #1402-1408).

Thus the evaluation of a post about an idea (i.e. an evaluation of that idea) is evaluated by others reviewing the postings. Based on what other assessments are made (i.e. the quantitative assessments from the evaluations of other evaluator users) affect how much merit a person earns, which then adjusts their influence score

**For each of the multiple additional users of the web merchant who are distinct from the multiple evaluator users and from the reviewer user, determining**

**whether to provide the review to the additional user based at least in part on the automatically generated aggregate assessments for the content of the review.**

Figure 5; Column 14 line 64 – column 15 line 4; the various ideas can be sorted according to outlook (i.e. whether an idea is rated in aggregate by the evaluators as being high or low). Further Figure 6A shows that various evaluations of an idea (and those evaluations of those comments or evaluations) can be sorted (e.g. by thread). While not explicitly showing that the comments (i.e. evaluations) can be sorted or filtered by the aggregate assessments (and thus shown based on those aggregate assessments) as is discussed above Williams does show that the aggregate assessments of an evaluation are used to determine how much merit is given to a user who posted that comment (i.e. evaluation). Thus determining whether to show a comment (i.e. an evaluation) based on the aggregate assessment of that comment would have been obvious to one of ordinary skill in the art at the time of the invention because elsewhere Williams does show filtering and displaying based on the aggregate assessment (e.g. for ideas that are abandoned or adopted) and the combination would have been predictable by using a technique elsewhere used by Williams to achieve a predictable result by filtering (i.e. displaying) a comment (i.e. an evaluation) based on aggregate assessments for the comment of the review.



Williams teaches that using these credentials provides for an online community that is self organizing – for example, weighting the influence credential provides for leadership to emerge (see column 12 line 1-10; also see column 1 line 58-59).

Tiwana and Willaims both address the use of approaches to track and recommend items to a user, thus they both are analogous art. Tiwana teaches rating items in an online community where a user becomes a top participant based on their feedback of other items. Williams shows how users in an online population evaluate each other's evaluations and how those evaluations of the evaluations are processed to provide users with additional influence in the online community, thus organizing the community to identify the thought leaders in the community.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Willaims, because it would have provided a predictable result in using the influence weighted approach taught by Williams in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Willaims. Additionally, one of ordinary skill in the art would have recognized the self organizing advantages of Williams in providing a way for a community to organize itself by identifying those making the most contributions (i.e. through providing evaluations and evaluations of those evaluations) to thus identify leadership in the community.

Regarding **Claim 12**, Tiwana teaches:

**12. (Original) The method of claim 11 including, before the automatic updating of the reputation weights of the one or more evaluator users, determining whether the received evaluations satisfy an evaluator reputation calculation threshold, and wherein the automatic updating of the reputation weights of the one or more evaluator users is performed only when it is determined that the received evaluations satisfy the evaluator reputation calculation threshold**

Page 247 column 2, evaluations for a user are counted as “useful”, i.e. using a threshold to determine when the votes are counted (versus useless ratings of a user’s reviews).

Regarding **Claim 13**, Tiwana teaches:

**13. (Original) The method of claim 12 wherein the evaluator reputation calculation threshold is based at least in part on a minimum degree of consensus existing among the received evaluations, and wherein the determining includes automatically calculating the existing degree of consensus among the received evaluations.**

Page 247 column 2, the minimum degree of consensus is based on a useful or useless rating.

Regarding **Claim 14**, Tiwana teaches measuring a user's ratings to that of a group as per the average group and average member contributions (page 245 column 2). Tiwana does not teach, but Willaims teaches:

**14. (Original) The method of claim 11 wherein the relationship of the quantitative assessments from the evaluation of an evaluator user to the quantitative assessments from the evaluations of other of the evaluator users that is used when automatically updating the reputation weight for that evaluator user is based on a degree of agreement between the quantitative assessments from the evaluation of the evaluator user and quantitative assessments from a consensus evaluation for the received evaluations.**

As per above, the degree of agreement (i.e. how much the other user's agree with a user's comment) is used to determine how much influence and merit a user earns.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Willaims, because it would have provided a predictable result in using the weighted approach taught by Willaims in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Willaims.

Regarding **Claim 15**, Tiwana does not teach, but Willaims teaches:

**15. (Original) The method of claim 11 wherein the reputation weights of the evaluator users that are used in the automatic generating of the aggregate assessments of the content of the review were automatically generated based on the previous evaluations by those evaluator users.**

As per above, the weights used in measuring influence for a user are based on given (i.e. previous) evaluations by those evaluator users.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Willaims, because it would have provided a predictable result in using the weighted approach taught by Willaims in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Willaims.

Regarding **Claim 16**, Tiwana teaches user's rating another user's rating and does not teach, but Willaims teaches:

**16. (Original) The method of claim 11 including, after the receiving of the evaluations from the evaluator users, for each of at least some of the evaluations receiving one or more ratings of the evaluation from users other than the evaluator user that provided the evaluation, and automatically modifying the reputation weights for evaluator users whose evaluations received ratings based at least in part on those ratings.**

As per above, all users in Williams receive updated reputation weights based on ratings of their evaluations.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Williams, because it would have provided a predictable result in using the weighted approach taught by Williams in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Williams.

Regarding **Claim 17**, Tiwana teaches:

**17. (Original) The method of claim 11 including, after the automatic updating of the reputation weights of the one or more evaluator users, receiving an indication that the content is no longer in use for determining reputation weights of the evaluator users, and automatically updating the reputation weights for each of those evaluator users to remove influence based on the relationship of the quantitative assessments from the evaluation of that evaluator user to the quantitative assessments from the evaluations of other of the evaluator users.**

Page 245 column 2, based on the time selected (ratings of contributions per week or month) suggests that ratings provided by individual users have a time element – furthermore Tiwana teaches the ratings of users over time – see page 244 column 2).

This suggests the modification of William's weight calculations be based on a view that takes into account time periods (i.e. weekly or monthly as suggested by Tiwana).

Regarding **Claim 18**, Tiwana does not teach but Williams teaches:

**18. (Original) The method of claim 11 wherein the automatic generating of the aggregate assessments of the content of the review is further based in part on an existing reputation weight of the reviewer user from which the review was received.**

Column 16 line 10-20; the aggregate assessment of the content of the review is based in part on the existing reputation weight of the user from which the review was received (e.g. in the example given the rating was 2 and the weight was 3.3, then the assessment is  $2 \times 3.3$  or 6.6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Williams, because it would have provided a predictable result in using the weighted approach taught by Williams in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Williams.

Regarding **Claim 19**, Tiwana does not teach but Williams teaches:

**19. (Original) The method of claim 18 wherein the reputation weight of the reviewer user is based on a degree of consistency between one or more of the automatically generated aggregate assessments of the content of the review and automatically generated aggregate assessments of the content of previous reviews received from the reviewer user.**

As per above, the reputation weight is based on both past assessments of previous reviews (how other's rated those reviews in the past) and how others view a current review. For example, if past reviews showed a high regard by others for a user's review and a current review has low regard, then this would incrementally decrease the reputation weight for that particular user.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Williams, because it would have provided a predictable result in using the weighted approach taught by Williams in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Williams.

Regarding **Claim 20**, Tiwana teaches:

**20. (Original) The method of claim 11 including automatically updating a reputation weight of the reviewer user from which the review was received based at least in part on one or more of the automatically generated aggregate assessments of the content of the review.**

Page 2 column 2, Delgado teaches that all the users in a population who provide an evaluation or rating have their weights updated based on the similarity (mathematical similarity) of that rating with the majority. The weights include comparison with the majority for all reviews that have been given.

Regarding **Claim 21**, Tiwana does not teach, but Williams teaches:

**21. (Original) The method of claim 20 including, before the automatic updating of the reputation weight of the reviewer user, determining whether the received evaluations satisfy an author reputation calculation threshold, and wherein the automatic updating of the reputation weight of the reviewer user is performed only when it is determined that the received evaluations satisfy the author reputation calculation threshold.**

Column 14 line 23-30, Since Williams suggests that negative or positive weights suggests dissimilar or similar tastes (i.e. likes) respectively, this suggests that weights for similar tastes be updated only when the correlation is positive, i.e. the user is rating something that they like in comparison with the population.

Regarding **Claim 22**, Tiwana teaches:

**22. (Original) The method of claim 11 including, before the automatic generating of the aggregate assessments of the content of the review,**



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**determining whether the received evaluations satisfy a content rating threshold, and wherein the automatic generating of the aggregate assessments of the content of the review is performed only when it is determined that the received evaluations satisfy the content rating threshold.**

Page 247 column 2, evaluations for a user are counted as “useful”, i.e. using a threshold to determine when the votes are counted (versus useless ratings of a user’s reviews).

Regarding **Claim 23**, Tiwana teaches:

**23. (Currently Amended) The method of claim 22 wherein the content rating threshold is based at least in part on a weighted number of the evaluations received for the review from the evaluator users that is based on the reputation weights of the evaluator users in such a manner that an evaluation from a first evaluator user with a first reputation weight has a different impact on that weighted number of evaluations than an evaluation from a distinct second evaluator user with a distinct second reputation weight.**

Tiwana teaches receiving evaluations for a review from various users. These ratings are not weighted. As discussed above, Delgado teaches weighting reviews from users based on their past history (i.e. different users have different weights based on their previous weightings).

Regarding **Claim 24**, Tiwana teaches:

**24. (Original) The method of claim 11 wherein each of the received evaluations include quantitative assessments of the contents of the review for each of the multiple available content rating dimensions.**

Page 247 column 2, evaluations for a user are counted as “useful”, i.e. using a threshold to determine when the votes are counted (versus useless ratings of a user’s reviews). Also see page 247 column 1, a 1 to 5 rating.

Regarding **Claim 25**, Tiwana teaches:

**25. (Original) The method of claim 24 including, before the receiving of the evaluations of the review, determining the multiple available content rating dimensions.**

page 247 column 1, a 1 to 5 rating

Regarding **Claim 26**, Tiwana teaches:

**26. (Original) The method of claim 11 including, before the receiving of the evaluations of the review, soliciting the evaluator users to provide evaluations of the review, the solicitations including indications of the multiple available content rating dimensions.**

Page 247 column 1, users can rate messages (i.e. are solicited to) according to multiple available rating dimensions (i.e. 1 through 5).

Regarding **Claim 27**, Tiwana teaches:

**27. (Original) The method of claim 11 wherein the automatic generating of the aggregate assessments of the content of the review includes generating an aggregate assessment for each of the multiple available content rating dimensions.**

Figure 3 shows an aggregate assessment for each of the multiple available content rating (i.e. various stars given).

Regarding **Claim 28**, Tiwana teaches:

**28. (Original) The method of claim 27 including automatically generating an overall aggregate assessment of the review based at least in part on the automatically generated aggregate assessments of the content of the review.**

Column 247 column 1 para 2, each message (i.e. item) by a user has shown for that item all the ratings by the users in the community.

Regarding **Claim 29**, Tiwana teaches:

**29. (Original) The method of claim 11 wherein the automatically generated aggregate assessments of the content of the review are each further based on a sales weighting for each of one or more of the evaluator users, the sales weighting of an evaluator user reflecting an amount of prior sales to that evaluator user.**

Page 247 column 2, amazon.com users are rating products that the company has sold (i.e. that they have purchased).

Regarding **Claim 30**, Tiwana teaches:

**30. (Original) The method of claim 11 including, after the automatic updating of the reputation weights for the evaluator users, ranking each evaluator user relative to other evaluator users based at least in part on automatically generated evaluator reputation scores of those evaluator users.**

Page 247 column 2, rankings of users compared to other users.

Regarding **Claim 31**, Tiwana teaches:

**31. (Original) The method of claim 30 wherein the reputation weight for each of the evaluator users is based on a combination of quantity and quality of evaluations provided by that evaluator user,**

Page 247 column 2, reputation is based on the useful votes obtained from a total number of ratings.

**and including automatically generating a distinct evaluator reputation rating score for each of the evaluator users based solely on the quality of the evaluations provided by that evaluator user, and wherein the evaluator reputation scores used for the ranking are the evaluator reputation rating scores.**

Page 247 votes are based on useful ratings by a reviewer

Regarding **Claim 32**, Tiwana teaches:

**32. (Original) The method of claim 30 including providing visible feedback to users of the rankings of at least some of the evaluator users.**

Page 246 Figure 3.

Regarding **Claim 33**, Tiwana teaches:

**33. (Original) The method of claim 11 wherein at least some of the evaluator users each have multiple existing reputation weights that correspond to previous evaluations by those evaluator users of content of different categories, and including, before the automatic updating of the reputation weights for the evaluator users, determining a category of the review, and wherein the automatic updating of the reputation weights of evaluator users that have multiple existing**

**reputation weights is performed for an existing reputation weight of that evaluator user for the determined category.**

Tiwana teaches a user participating in a particular group (page 245 column 1 - contributions to that group). Tiwana also suggests various groups or web-based communities existing - table 1 on page 244. This suggests a user may participate in several groups on the internet. The participating in several groups suggests that ratings for that group or community will be different. Thus in combination with the rating weighting approach of Delgado teaches that weights would be different based on the participation in the group (i.e. category of review).

Regarding **Claim 34**, Tiwana teaches:

**34. (Original) The method of claim 11 wherein at least some of the evaluator users each have multiple existing reputation weights that correspond to different types of activities previously performed by those evaluator users, and wherein the automatic updating of the reputation weights of evaluator users that have multiple existing reputation weights is performed for an existing reputation weight of that evaluator user corresponding to prior review evaluation activities of that evaluator user.**

Tiwana teaches a user participating in a particular group (page 245 column 1 - contributions to that group). Tiwana also suggests various groups or web-based communities existing - table 1 on page 244. This suggests a user may participate in several groups on the internet. The participating in several groups suggests that ratings

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for that group or community will be different. Thus in combination with the rating weighting approach of Delgado teaches that weights would be different based on the participation in the group.

Regarding **Claim 35**, Tiwana teaches:

**35. (Original) The method of claim 11 including, after the automatic updating of the reputation weights for the evaluator users, providing indications of the reputation weights for one or more of those evaluator users to one or more third-party computing devices so that they can interact with those evaluator users based on those reputation weights.**

Page 246 Figure 4, rating visualizer.

Regarding **Claim 36**, Tiwana teaches:

**36. (Original) The method of claim 11 wherein the method is performed by the computing device on behalf of another computing system with whom the evaluator users are interacting, the method performed as a service to the another computing system.**

Page 247 column 1 para 1, Tiwana teaches the method operating over the web (i.e. as a service to another computing system, i.e. the internet).

Regarding **Claim 37**, Tiwana teaches:

**37. (Original) The method of claim 11 including receiving from one or more third- party computing devices information related to the reputations of one or more of the evaluator users, the received information based on interactions of those evaluator users with those third- party computing devices, and automatically updating the reputation weights for each of those evaluator users based on the received information.**

Page 247 column 1 para 1, Tiwana teaches the method operating over the web (i.e. through a third party computing device).

Regarding **Claim 38**, Tiwana teaches:

**38. (Original) The method of claim 11 wherein the review is information obtained from a blog authored by the reviewer user.**

Tiwana teaches information obtained from messages in a community (i.e. items rated). Tiwana does not teach where the review is information obtained from a blog authored by the reviewer user, however the claimed functionality of what is done with the data is the same, i.e., the recited method steps would be performed the same regardless of the specific data. Further, the structural elements remain the same regardless of the specific data. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d*



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*1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP ' 2106.*

**Claims 59-68** recite similar limitations to those addressed by the rejection of claims 11-38 above, and are therefore rejected under the same rationale.

Furthermore regarding **Claim 59**, Tiwana teaches an apparatus for performing the method steps (see Figure 4 page 246, “physical level”).

Regarding **Claim 69**, Tiwana does not teach, but Williams teaches

**69. (New) The method of claim 11 wherein the automatic generating of the aggregate assessment of the content of the review based on the existing reputation weights of the evaluator users is performed in a manner independent of the multiple additional users.**

As discussed above, Williams teaches only those individuals who have evaluated evaluations contribute to the aggregate assessment of that evaluation – this is done independently of the other users.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Williams, because it would have provided a predictable result in using the weighted approach

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taught by Williams in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Williams.

Regarding **Claim 70**, Tiwana does not teach, but Williams teaches

**70. (New) The method of claim 69 wherein the automatic updating of the existing reputation weights of the one or more evaluator users is performed in a manner independent of the multiple additional users.**

As discussed above, Williams teaches that the updating of the weights is done based only on those who have participated in the evaluations of the evaluations (e.g. the comments and voting on a feedback post about an idea) – the reputation weights are updated independent of those who have not participated (i.e. the multiple additional users).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Williams, because it would have provided a predictable result in using the weighted approach taught by Williams in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Williams.

5. **Claims 71 and 72** are rejected under 35 USC. 103(a) as being unpatentable over **Tiwana** in view of **Williams** and further in view of “Recommender systems: a

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GroupLens perspective”, JA **Konstan**, J Riedl, A Borchers, JL ... - ... systems: Papers from the ..., 1998 - aaai.org

(hereinafter **Konstan**)

Regarding **Claims 71 and 72**, Tiwana and Williams teach a recommender system that relies upon a single dimension content rating.

Tiwana and Williams do not teach there are multiple content rating dimensions with two dimensions as per:

**wherein the multiple available content rating dimensions include at least two of usefulness, accuracy, informativeness, and humorousness.**

However the use of multiple content rating dimensions in recommender systems is taught by Konstan.

Konstan teaches that recommender systems can operate across more than one dimension (i.e. those providing feedback can rate something in more than one category – see page 63 column 1 under user interface. Here Konstan teaches that using more than one rating dimension for evaluation is known in the art of recommendation systems. Konstan teaches that there are items that naturally lend themselves to being rated in more than one dimension.

One of ordinary skill in the art at the time of the invention would have modified the collective teachings of Tiwana and Williams regarding an online evaluation system which rates on one dimension where user's ratings are weighted based on their demonstrated online proficiency (as evaluated by other users) to include the step of providing ratings which are multidimensional (i.e. across more than one dimension) because it would have provided a predictable result in providing a weighted evaluation scheme which rates evaluations across more than one dimension.

6. **Claims 49-58** are rejected under 35 USC. 103(a) as being unpatentable over "A social exchange architecture for distributed Web communities"

Amrit **Tiwana**, Ashley Bush. Journal of Knowledge Management. Kempston: 2001. Vol. 5, Iss. 3; p. 242 (7 pages), (hereinafter **Tiwana**) in view of "Memory-Based Weighted-Majority Prediction", J Delgado, N Ishii - ACM SIGIR'99 Workshop on Recommender Systems: Algorithms ..., 1999 – Citeseer (hereinafter **Delgado**)

Regarding **Claim 49**, Tiwana teaches:

**49. (Previously Presented) A computer-readable medium whose contents cause a computing device to select information to provide to users based on reputations of evaluators of the information, by performing a method comprising::**

**receiving from a reviewer user a review related to an available item;**

page 247 column 2, user's review a particular product (i.e. an item).

**receiving evaluations of the review from each of multiple evaluator users, each received evaluation including a quantitative assessment of contents of the review for each of one or more of multiple content rating dimensions available for use in assessing the review,**

page 247 column 2, user's review a particular review of an item, based on a two-level feedback scale. Thus the reviews of the review are indicating a level of agreement with the review regarding whether they found them of value.

**automatically generating at least one aggregate assessment of the content of the review based at least in part on combining quantitative assessments from the received evaluations for the review,**

page 246 column 2, based on the reviewers evaluation of a review, votes of useful and not useful are tallied for a particular user.

Tiwana teaches a recommender system where users rate other reviewers ratings, but does not teach; however Delgado teaches:

**each of the evaluator users having an existing reputation weight based at least in part on previous evaluations;**

page 1 column 2 bottom para, weights are used for users based on past performance. These weights are generated based on how closely the reviewer's performance matches the majority.

**at least one of the generated aggregate assessments being further based on the reputation weights of the evaluator users in such a manner that a first quantitative assessment from a first evaluator user with a first reputation weight has a different impact on that generated aggregate assessment than that first quantitative assessment from a distinct second evaluator user with a distinct second reputation weight;**

page 2 column 2 equation 2.2., each user has a calculated prediction (i.e. a review or item  $j$ ) based on an a weight that is unique for that user ( $w_{a,i}$ ). These weights depend on the past performance of the reviewers in the past, thus they are different weights.

**automatically updating the reputation weights for each of one or more of the evaluator users based on a relationship of the quantitative assessments from the evaluation of that evaluator user to the quantitative assessments from the evaluations of other of the evaluator users; and**

page 2 column 2, weights for a user are based and updated from a comparison with the votes of the other users (i.e. to what degree the vote from an individual user agrees with the other users is used to determine that user's weight – thus if a user deviates from the consensus repeatedly, then their review or vote is weighted low. Conversely, if a user's review consistently agrees with the majority, then their weight is determined to be high).

**determining whether to provide the review to another user based at least in part on one or more of the automatically generated aggregate assessments for the content of the review.**

Page 3 section 3.3, Delgado teaches that a user may deviate from the population to such a degree that the review or rating is considered a mistake. This concept as applied to an individual review suggests that the review is beyond bounds and thus is not valuable to present (see also page 2 column 2 bottom, dissimilar tastes as measured by an opposite rating suggests not presenting the review).

Tiwana and Delgado both address the use of approaches to track and recommend items to a user, thus they both are analogous art. Tiwana teaches rating items in an online community where a user becomes a top participant based on their feedback of other items. Delgado shows what is known in the art regarding various populations rating items (i.e. reviewing them) in an online context and how those ratings may be processed.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Delgado, because it would have provided a predictable result in using the weighted approach taught by Delgado in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Delgado.

Regarding **Claim 50**, Tiwana teaches measuring a user's ratings to that of a group as per the average group and average member contributions (page 245 column 2). Tiwana does not teach, but Delgado teaches::

**wherein the relationship of the quantitative assessments from the evaluation of an evaluator user to the quantitative assessments from the evaluations of other of the evaluator users that is used when automatically updating the reputation weight for that evaluator user is based on a degree of agreement between the quantitative assessments from the evaluation of the evaluator user and quantitative assessments from a consensus evaluation for the received evaluations.**

page 2 column 2, weights are updated based on how the quantitative assessment of a user agrees with that of the majority (i.e. a consensus).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Delgado, because it would have provided a predictable result in using the weighted approach taught by Delgado in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Delgado.

Regarding **Claim 51**, Tiwana does not teach, but Delgado teaches:

**51 wherein the reputation weights of the evaluator users that are used in the automatic generating of the aggregate assessments of the content of the**



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**review were automatically generated based on the previous evaluations by those evaluator users.**

Page 3 column 1 top para, weights are updated based on the ratings (i.e. predictions) of users – this is based on the degree that those ratings agree with the consensus.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tiwana to include the teachings of Delgado, because it would have provided a predictable result in using the weighted approach taught by Delgado in the online evaluation system of Tiwana. The combination is predictable and does not destroy either the teachings of Tiwana or Delgado.

Regarding **Claim 52**, Tiwana does not teach but Delgado teaches:

**52. wherein the automatic generating of the aggregate assessments of the content of the review is further based in part on an existing reputation weight of the reviewer user from which the review was received.**

Page 2 column 2, assessments of a review are based on the weights of individual reviewer users

Regarding **Claim 53**, Tiwana teaches:

**53. automatically updating a reputation weight of the reviewer user from which the review was received based at least in part on one or more of the automatically generated aggregate assessments of the content of the review.**

Page 2 column 2, Delgado teaches that all the users in a population who provide an evaluation or rating have their weights updated based on the similarity (mathematical similarity) of that rating with the majority. The weights include comparison with the majority for all reviews that have been given.

Tiwana does not teach but Delgado teaches:

**wherein the reputation weight of the reviewer user is based on a degree of consistency between one or more of the automatically generated aggregate assessments of the content of the review and automatically generated aggregate assessments of the content of previous reviews received from the reviewer user.**

Page 2 column 2, the weights for a reviewer users is based on similarity (i.e. a degree of consistency) of that reviewer's historical reviews.

Regarding **Claim 54**, Tiwana teaches:

**54. before the automatic generating of the aggregate assessments of the content of the review, determining whether the received evaluations satisfy a content rating threshold, and wherein the automatic generating of the aggregate assessments of the content of the review is performed only when it is determined that the received evaluations satisfy the content rating threshold.**

Page 247 column 2, evaluations for a user are counted as “useful”, i.e. using a threshold to determine when the votes are counted (versus useless ratings of a user’s reviews).

Regarding **Claim 55**, Tiwana teaches:

**55. wherein each of the received evaluations include quantitative assessments of the contents of the review for each of the multiple available content rating dimensions.**

Page 247 column 2, evaluations for a user are counted as “useful”, i.e. using a threshold to determine when the votes are counted (versus useless ratings of a user’s reviews). Also see page 247 column 1, a 1 to 5 rating.

Regarding **Claim 56**, Tiwana teaches:

**56. wherein the automatic generating of the at least one aggregate assessments of the content of the review includes generating multiple aggregate assessment for each of the multiple available content rating dimensions.**

Figure 3 shows an aggregate assessment for each of the multiple available content rating (i.e. various stars given).

**and further automatically generating an overall aggregate assessment of the review based at least in part on the automatically generated aggregate assessments of the content of the review.**

Column 247 column 1 para 2, each message (i.e. item) by a user has shown for that item all the ratings by the users in the community.

Regarding **Claim 57 and 58**, Tiwana teaches:

Tiwana teaches software for performing the method (see page 244 “web based front end” and page 246 Figure 3. Also note Figure 4 on page 246).

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on 571-272-6737. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS 4-2-2010  
/Jonathan G. Sterrett/  
Primary Examiner, Art Unit 3623

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